

AMENDMENT  
U.S. Appln. No. 09/970,682

**REMARKS**

Upon entry of the claim amendments, Claims 1 through 20 will be all the claims pending in the application.

New Claims 16-20 are supported by original Claims 3-7, respectively. Amended Claims 3 and 7 are supported by original Claims 3 and 7. No new matter has been added.

Referring to the rejection of Claims 1-2, 4, 9-10 and 12 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,329,488 to Terry, *et al.* ("Terry"), Applicants respectfully traverse.

Terry does not disclose each and every element of Claims 1-2, 4, 9-10 and 12. In particular, Terry fails to disclose a mineral filler selected from compounds of B, Al, Ti, Zn, Zr, Cr, Fe, and silicates, and mixtures thereof.

At Section No. 1, page 2, of the Action, the Examiner asserts that Terry further teaches "the addition of a Fe compound as required by claims 1-2 and 10." Applicants respectfully disagree.

During patent examination, the claims must be interpreted as broadly as their terms reasonably allow. The broadest reasonable interpretation must be consistent with the specification and with the interpretation that those skilled in the art would reach.

Terry's only mention of a Fe compound is Terry's disclosure of ferric acetylacetonate as an example of a metallic catalyst for facilitating the reaction between a polyol and polyisocyanate. Column 5, lines 38-48, and column 7, lines 25-38. Iron as a catalyst, which is present in the form of an organo-metallic compound in Terry, is entirely different from the recited iron mineral filler. A person of ordinary skill in the art would not interpret the presently recited mineral filler as encompassing Terry's disclosed iron catalyst. The meaning of "mineral filler" when interpreted by those skilled in the art and the meaning of "mineral filler" when properly construed according to the teachings of the underlying disclosure both exclude the ferric acetylacetonate disclosed in Terry from the scope of Claims 1-2, 4, 9-10 and 12.

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Referring to the rejection of Claims 1-15 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,769,287 to Zaopo, *et al.* ("Zaopo") in view of U.S. Patent No. 4,503,124 to Keane, *et al.* ("Keane"), Applicants respectfully traverse.

Zaopo is not the closest prior art with respect to Claim 1. In this regard, the present invention belongs to the field of winding wires aimed at withstanding partial discharges. Zaopo is entirely silent about the resistance to partial discharge of the varnish it discloses.

Keane, on the other hand, is clearly directed to Corona-resistant wires, i.e. to wires able to withstand partial discharges. Accordingly, Keane represents the closest prior art with respect to the invention as claimed in claim 1.

The main difference between Keane and the invention as claimed in claim 1 is that Keane's polymer resin is not a copolymer of a thermoplastic or thermosetting resin with an alkoxysilane. In fact, the problem raised by the varnish described in Keane is that its ability to withstand partial discharges is limited and insufficient in certain applications. Page 2, lines 22-28, of the specification. In other words, there exists a need in the art to have a composition that can be used as a varnish for a winding wire that can withstand partial discharges and voltage peaks at very high temperatures. To this aim, the claimed invention proposes to replace the standard polymer of Keane with a copolymer of a thermoplastic or thermosetting resin and an alkoxysilane.

Without the benefit of Applicants' present disclosure, a person of ordinary skill in the art would attempt to solve the problem identified above by looking into the available prior art in the field of winding wires, in order to improve the partial discharge resistance at high temperature of Keane. The skilled artisan would never look into the general prior art related to varnishes that do not deal with the partial discharge phenomenon. Therefore, the skilled artisan would not find Zaopo, which, even though it may deal with varnishes for wires, is entirely silent about the behavior of such varnishes in the presence of partial discharges.

Thus, it is only with the benefit of hindsight reasoning that the Examiner is able to start from Zaopo and combine its teachings with Keane.

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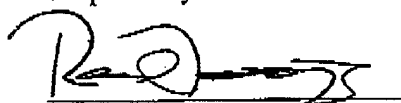
However, even if a person of ordinary skill in the art, starting from Keane, would look to Zaopo in order to solve the problem identified above, the person would never achieve the invention as claimed in claim 1. Indeed, the skilled artisan would not know on which parameter to act: the polymer or the mineral filler. Following the teachings of Keane, where it is indicated that the high ability to withstand partial discharges comes from the presence of the filler in the material, the skilled artisan is necessarily directed towards acting on the filler to increase the performance in terms of partial discharge resistance.

Choosing to act on the polymer, i.e., choosing to modify the polymer, is proof of a non-obvious step.

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, she is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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